Į.		
~		
>		

L Number	Hits	Search Text	Dis	Time stamp
1	34962	mr or mre or magneto adj resist\$5 or	EPO; JPO;	2003/05/21
		magnetoresist\$5 or amr or magnetic\$4 adj	DERWENT	10:43
		resist\$5 or gmr\$1 or spin adj valve\$1 or		
		svmr\$1 or tjmr\$1 or tmj\$1 or		
		g11b005/39.ipc. or tmr or mram or magnetic		
		adj memory or magnetic adj random adj		
		access adj memory or TJM or macro adj		
		magnetoresist\$5 or macromagnetoresist\$5		
2	65990	tunnel\$3 or cpp or c-p-p or c adj p adj p or	EPO; JPO;	2003/05/21
		current near3 perpendicular\$2	DERWENT	10:44
3	1111	(mr or mre or magneto adj resist\$5 or	EPO; JPO;	2003/05/21
		magnetoresist\$5 or amr or magnetic\$4 adj	DERWENT	09:44
		resist\$5 or gmr\$1 or spin adj valve\$1 or		
		svmr\$1 or tjmr\$1 or tmj\$1 or		
		g11b005/39.ipc. or tmr or mram or magnetic		
		adj memory or magnetic adj random adj		
		access adj memory or TJM or macro adj		
		magnetoresist\$5 or macromagnetoresist\$5)		
		and (tunnel\$3 or cpp or c-p-p or c adj p adj		
		p or current near3 perpendicular\$2)		
4	1187436	vertical or bias\$3 or permanent or	EPO; JPO;	2003/05/21
		barkhausen or mdc or magnetic adj2	DERWENT	09:47
		domain\$1 or magnetization or magnet or		
	1	magnets or barkhaussen		
5	375	((mr or mre or magneto adj resist\$5 or	EPO; JPO;	2003/05/21
		magnetoresist\$5 or amr or magnetic\$4 adj	DERWENT	09:47
		resist\$5 or gmr\$1 or spin adj valve\$1 or	·	
		svmr\$1 or tjmr\$1 or tmj\$1 or		
		g11b005/39.ipc. or tmr or mram or magnetic		
		adj memory or magnetic adj random adj		
		access adj memory or TJM or macro adj		
		magnetoresist\$5 or macromagnetoresist\$5)		
		and (tunnel\$3 or cpp or c-p-p or c adj p adj		
		p or current near3 perpendicular\$2)) and		
		(vertical or bias\$3 or permanent or		
		barkhausen or mdc or magnetic adj2		
		domain\$1 or magnetization or magnet or		
		magnets or barkhaussen)		
6	269200	(magnet or magnets or barkhausen or ((hard	EPO; JPO;	2003/05/21
		or longitudinal\$4) adj2 bias\$4) or mdc or	DERWENT	09:48
		domain\$ or barkhaussen or popcorn or pop		
		adj corn or wiggle)		
7	1228526	(vertical or bias\$3 or permanent or	EPO; JPO;	2003/05/21
		barkhausen or mdc or magnetic adj2	DERWENT	09:48
		domain\$1 or magnetization or magnet or		
		magnets or barkhaussen) or ((magnet or		
		magnets or barkhaussen, or ((hard or		
	İ	longitudinal\$4) adj2 blas\$4) or mdc or		
		domain\$ or barkhaussen or popcorn or pop		
	I	avinanty of parkitalisation hobotto of bob	l	1

\			
,			
,			

			/	
8	379	((mr or mre or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or g11b005/39.ipc. or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5) and (tunnel\$3 or cpp or c-p-p or c adj p adj p or current near3 perpendicular\$2)) and ((vertical or bias\$3 or permanent or barkhausen or mdc or magnetic adj2 domain\$1 or magnetization or magnet or magnets or barkhausen) or ((magnet or magnets or barkhausen or ((hard or longitudinal\$4) adj2 bias\$4) or mdc or	EPO; JPO; DERWENT	2003/05/21 09:48
		domain\$ or barkhaussen or popcorn or pop		
		adj corn or wiggle)))		
9	741	mr or mre or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or	IBM_TDB	2003/05/21 10:43
		g11b005/39.ipc. or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5		
10	2209	tunnel\$3 or cpp or c-p-p or c adj p adj p or	IPM TOD	2002/05/24
		current near3 perpendicular\$2 or barrier	IBM_TDB	2003/05/21 10:44
11	36	(mr or mre or magneto adj resist\$5 or	IRM TOP	2003/05/21
12	1334	magnetoresist\$5 or amr or magnetic\$4 adj resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or g11b005/39.ipc. or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5) and (tunnel\$3 or cpp or c-p-p or c adj p adj p or current near3 perpendicular\$2 or barrier) (seed or buffer or underlayer or under adj	IBM_TDB	2003/05/21
'-	1334	layer or seedlayer) near4 free	EPO; JPO; DERWENT	10:46
13	23	(mr or mre or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj	EPO; JPO; DERWENT	10:46 2003/05/21 10:46
		resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or g11b005/39.ipc. or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5) and ((seed or buffer or underlayer or under adj layer or seedlayer) near4 free)		



L Number	Hits	Search Text	DB	Time stamp
1	12516	(mr or mre or magneto adj resist\$5 or	USPAT;	2003/05/21
•	12310	magnetoresist\$5 or amr or magnetic\$4 adj	US-PGPUB	14:44
	resist\$5 or gmr\$1 or spin adj valve\$1 or	US-PGPUB	14:44	
	svmr\$1 or tjmr\$1 or tmj\$1 or tmr or mram			
İ		or magnetic adj memory or magnetic adj		
		random adj access adj memory or DSV or		
		TJM or macro adj magnetoresist\$5 or		
-				
		macromagnetoresist\$5).ti,ab,clm. or "360/113" or 360/313-327.33.ccis. or		
		428/692-693.ccls. or 338/32\$2.ccls. or		
		324/207.21.ccis. or 324/252.ccis. or		
		365/171.ccls. or 365/173.ccls. and (tunnel\$3		
		•		
		or cpp or c-p-p or c adj p adj p or current near3 perpendicular\$2).ti,ab,clm.		
2	442	1	HEDAT	0000/05/04
_	442	(mr or mre or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj	USPAT;	2003/05/21
			US-PGPUB	14:45
		resist\$5 or gmr\$1 or spin adj valve\$1 or		
		svmr\$1 or tjmr\$1 or tmj\$1 or tmr or mram		
		or magnetic adj memory or magnetic adj		
		random adj access adj memory or DSV or		
		TJM or macro adj magnetoresist\$5-or		
		macromagnetoresist\$5).ti,ab,clm. and		
		("360/113" or 360/313-327.33.ccls. or		
		428/692-693.ccls. or 338/32\$2.ccls. or		
		324/207.21.ccls. or 324/252.ccls. or		
		365/171.ccls. or 365/173.ccls.) and		
		(tunnel\$3 or cpp or c-p-p or c adj p adj p or		
	400547	current near3 perpendicular\$2).ti,ab,clm.		
3	128547	(seed or seedlayer or underlayer or under	USPAT;	2003/05/21
		adj layer or buffer or bias\$3 or barkhausen	US-PGPUB	14:51
		or mdc or magnetic adj2 domain\$1 or		
		magnetization or magnet or magnets or		
		barkhaussen).ti,ab.		1



4	188	((mr or mre or magneto adj resist\$5 or	ÚSPAT;	2003/05/21
		magnetoresist\$5 or amr or magnetic\$4 adj	US-PGPUB	14:51
		resist\$5 or gmr\$1 or spin adj valve\$1 or		
		svmr\$1 or tjmr\$1 or tmj\$1 or tmr or mram		
		or magnetic adj memory or magnetic adj		1
		random adj access adj memory or DSV or		
		TJM or macro adj magnetoresist\$5 or		
		macromagnetoresist\$5).ti,ab,clm. and		
		("360/113" or 360/313-327.33.ccls. or		
		428/692-693.ccls. or 338/32\$2.ccls. or		
		324/207.21.ccls. or 324/252.ccls. or		
		365/171.ccls. or 365/173.ccls.) and		
		(tunnel\$3 or cpp or c-p-p or c adj p adj p or		
		current near3 perpendicular\$2).ti,ab,clm.)		
		and ((seed or seedlayer or underlayer or		
		under adj layer or buffer or bias\$3 or		
		barkhausen or mdc or magnetic adj2		
		domain\$1 or magnetization or magnet or		
1		magnets or barkhaussen).ti,ab.)		